## R307. Environmental Quality, Air Quality.

R307-509. Oil and Gas Industry: Leak Detection and Repair Requirements.

### R307-509-1. Purpose.

R307-509 establishes requirements for conducting leak detection and repairs at oil and gas operations to control emissions of volatile organic compounds.

## R307-509-2. Definitions

"Fugitive emissions" are considered any visible emissions observed using optical gas imaging or a Method 21 instrument reading of 500 ppm or greater.

"Fugitive emissions component" means any component that has the potential to emit fugitive emissions of VOC, including but not limited to valves, connectors, pressure relief devices, open-ended lines, flanges, covers and closed vent systems, thief hatches or other openings, compressors, instruments, and meters.

# R307-509-3. Applicability.

- (1) R307-509 applies to each fugitive emissions component at a well site as defined in 40 CFR 60.5430a, Subpart 0000a Standards of Performance for Crude Oil and Natural Gas Production, Transmission and Distribution and is required to control emissions in accordance with R307-506 and R307-507.
- (a) R307-509 does not apply to a fugitive emissions component that is subject to an approval order issued under R307-401-8.

## R307-509-4. Leak Detection and Repair Requirements.

- (1) Applicable sources shall comply with the following:
- (a) The owner/operator shall develop an emissions monitoring plan that will be available upon request to review. At a minimum, the plan shall include:
  - (i) monitoring frequency;
  - (ii) monitoring technique and equipment;
- (iii) procedures and timeframes for identifying and repairing leaks;
  - (iv) recordkeeping practices; and
- (v) calibration and maintenance procedures for monitoring equipment.
- (b) The plan shall address monitoring for difficult-to-monitor and unsafe-to-monitor components.
- (c) The owner/operator shall conduct monitoring surveys on site to observe each fugitive emissions component for fugitive emissions.
- (d) Monitoring surveys shall be conducted according to the following schedule:

- (i) No later than 180 days after January 1, 2018, or no later than 60 days after startup of production, as defined in 40 CFR 60 Subpart 0000a Standards of Performance for Crude Oil and Natural Gas Production, Transmission and Distribution, whichever is later.
- (ii) Semiannually after the initial monitoring survey.

  Consecutive semiannual monitoring surveys shall be conducted at least four months apart.
- (iii) Annually after the initial monitoring survey for "difficult-to-monitor" components.
- (iv) As required by the owner/operator's monitoring plan for "unsafe-to-monitor" components.
- (e) Monitoring surveys shall be conducted using one or both of the following to detect fugitive emissions:
- (i) Optical gas imaging (OGI) equipment. OGI equipment shall be capable of imaging gases in the spectral range for the compound of highest concentration in the potential fugitive emissions source.
- (ii) Monitoring equipment that meets U.S. EPA Method 21, 40 CFR Part 60, Appendix A.
- (f) If fugitive emissions are detected at any time, the owner/operator shall repair the fugitive emissions component as soon as possible but no later than 15 calendar days after detection. If the repair or replacement is technically infeasible, would require a vent blowdown, a well shutdown or well shut-in, or would be unsafe to repair during operation of the unit, the repair or replacement shall be completed during the next well shutdown, well shut-in, after an unscheduled, planned or emergency vent blowdown or within 24 months, whichever is earlier.
- (g) The owner/operator shall resurvey the repaired or replaced fugitive emission component no later than 30 calendar days after the fugitive emission component was repaired.

#### R307-509-5. Recordkeeping.

The owner/operator shall maintain records of the emissions monitoring plan, monitoring surveys, repairs, and resurveys.

KEY: air pollution, oil, gas

Date of Enactment or Last Substantive Amendment: [October 7, 2014]2017

Authorizing, and Implemented or Interpreted Law: 19-2-104(1)(a)